

CLAIMS

- 1 1. A method for interactive medical treatment planning involving multiple
2 participants using multiple treatment planning stations, comprising the steps of:
3 (a) establishing one of said treatment planning stations as a session controller and
4 launching treatment planning software thereon;
5 (b) establishing a communication connection between said session controller
6 treatment planning station and all of said treatment planning stations participating in a
7 planning session; and
8 (c) displaying, on all participating treatment planning stations, treatment plan
9 information being displayed on said session controller treatment planning station.
- 1 2. A method as set forth in claim 1; further comprising the step of:
2 (d) designating one of said treatment planning stations as an active controller, said
3 active controller controlling manipulation of said treatment planning information.
- 1 3. A method as set forth in claim 2, wherein said active control of said treatment
2 planning session is regulated by said session controller treatment planning station.

1 4. A method as set forth in claim 3, wherein step (d) comprises at least the steps
2 of:

3 (e) generation of an active-control request by a treatment planning station;

4 (f) processing of said active-control request by said session controller treatment
5 planning station; and

6 (g) authorizing or denying said active-control request by said session controller
7 treatment planning station, wherein if said active-control request is granted, said
8 treatment planning station generating said active-control request is given active control of
9 said treatment planning session, and if said active-control request is denied, said
10 treatment planning station generating said active-control request is denied active-control
11 of said treatment planning session.

1 5. A method as set forth in claim 4, wherein at least two of said treatment
2 planning stations are located in geographically diverse locations.

1 6. A method as set forth in claim 5, wherein each of said treatment planning
2 stations includes video conferencing capability, and wherein said method further
3 comprises the step of:

4 (h) transmitting video and audio signals using said video conferencing capability
5 of said treatment planning stations so that participants to said treatment planning session
6 can see and hear the other participants in the session while the session is in progress.

1 7. A method as set forth in claim 6, wherein said treatment planning session is for
2 planning radiation therapy and said participants in said treatment planning session include
3 at least a dosimetrist and a radiation oncologist, each located at a geographically diverse
4 location.

1 8. A method as set forth in claim 7, wherein said treatment planning stations are
2 coupled to each other via a network connection.

1 9. A method as set forth in claim 8, wherein said network connection comprises
2 the Internet.

1 10. A method as set forth in claim 8, wherein said network connection
2 comprises the Next Generation Internet (NGI) or other high bandwidth connection.

1 11. A method as set forth in claim 9, wherein said manipulation of said treatment
2 plan information includes at least one of contouring, rotating, or pointing at locations in
3 images being displayed on said treatment planning stations and inputting treatment area
4 and treatment dosage information into said treatment planning software.

1 12. A system for interactive medical treatment planning involving multiple
2 participants using multiple treatment planning stations, the system comprising:
3 means for establishing one of said treatment planning stations as a session
4 controller and launching treatment planning software thereon;
5 means for establishing a communication connection between said session
6 controller treatment planning station and all of said treatment planning stations
7 participating in a planning session; and
8 means for displaying, on all participating treatment planning stations, treatment
9 plan information being displayed on said session controller treatment planning station.

1 13. A system as set forth in claim 12, further comprising means for designating
2 one of said treatment planning stations as an active controller, said active controller
3 controlling manipulation of said treatment planning information.

1 14. A system as set forth in claim 13, wherein said active control of said
2 treatment planning session is regulated by said session controller treatment planning
3 station.

1 15. A system as set forth in claim 14, wherein designating means includes:
2 means for generation of an active-control request by a treatment planning station;
3 means for processing said active-control request by said session controller
4 treatment planning station; and
5 means for authorizing or denying said active-control request by said session
6 controller treatment planning station, wherein if said active-control request is granted,
7 said treatment planning station generating said active-control request is given active
8 control of said treatment planning session, and if said active-control request is denied,
9 said treatment planning station generating said active-control request is denied active-
10 control of said treatment planning session.

1 16. A system as set forth in claim 15, wherein at least two of said treatment
2 planning stations are located in geographically diverse locations.

1 17. A system as set forth in claim 16, wherein each of said treatment planning
2 stations includes video conferencing capability, and wherein said method further includes
3 means for transmitting video and audio signals using said video conferencing capability
4 of said treatment planning stations so that participants to said treatment planning session
5 can see and hear the other participants in the session while the session is in progress.

1 18. A system as set forth in claim 17, wherein said treatment planning session is
2 for planning radiation therapy and said participants in said treatment planning session
3 include at least a dosimetrist and a radiation oncologist, each located at a geographically
4 diverse location.

1 19. A system as set forth in claim 18, wherein said treatment planning stations are
2 coupled to each other via a network connection.

1 20. A system as set forth in claim 8, wherein said network connection comprises
2 the Internet.